

WHAT IS CLAIMED IS:

1. A method for a communication scheme between a plurality of applications over heterogeneous networks, comprising:

 sending an alias identifier via a first application;

 receiving the alias identifier by an alias mechanism,

 wherein the alias identifier is associated with a command, an application identity and an application layer address, and wherein the alias identifier, the command, the application identity, and the application layer address are stored in a data storage medium,

 wherein at least one of: i) the alias mechanism authenticates the alias identifier via the data storage medium, and ii) the alias mechanism executes the command associated with the alias identifier.

2. The method of claim 1, wherein the alias mechanism is at least one of an alias device and an alias switching service,

 wherein the alias device attempts resolving the alias identifier via the data storage medium and if the alias identifier is resolved with at least one destination application layer address and a command, the alias device executes the command, if the destination application layer address is of a different network than the first application, then the alias device forwards the alias identifier to the alias switching service,

 wherein the alias switching service executes at least one of:

 i) attempts resolving at least one of the alias identifier via the data storage medium and if the alias identifier is resolved with the at least one destination application layer address and the command, the alias switching service executes the command, and

 ii) attempts providing a connection between the first application and the second application.

3. The method of claim 1, wherein if the alias mechanism does one of not authenticate the alias identifier and not execute the command associated with the alias identifier, then an error indication is sent to the first application.

4. The method of claim 1, further comprising:

managing the data storage medium via a management interface to at least one of modify the data storage medium, add an additional entry to the data storage medium, and cancel the additional entry to the data storage medium.

5. The method of claim 4, further comprising:

controlling access to the data storage medium via at least one of an encryption, a permission access, and a permission authentication.

6. The method of claim 1, wherein the first application is at least one of a pager, an access terminal, a computer, a telephony device, supplementary telephony services, an error message, an interactive voice response proxy, a facsimile, a video conferencing device, a netmeeting device, an external device, a signal switching point, a PDA, SMS, and an application.

7. The method of claim 1, wherein the second application is at least one of a pager, an access terminal, a computer, a telephony device, supplementary telephony services, an error message, an interactive voice response proxy, a facsimile, a video conferencing device, a netmeeting device, an external device, a signal switching point, a PDA, SMS, and an application.

8. The method of claim 1 wherein the data storage medium is accessible and modifiable by at least one of the first and second applications via a management interface.

9. The method of claim 2, wherein the entry in the data storage medium is automatically updated by an update system via the management interface.

10. The method of claim 1, further comprising:
requiring an access code from a first application for authentication.

11. The method of claim 10, wherein the access code is at least one of a tone code, a certificate, a smart card, a voice signature, a personal identification number (PIN), a password, and a biometrics-based identification.

12. The method of claim 11, wherein the biometrics-based identification is based on at least one of a handprint, fingerprint, thumbprint, retina, skin sample, hair sample, body fluid sample, facial scan, dental scan, and dental sample.

13. The method of claim 2, wherein the alias switching service translates a message from the first application to the second application, by converting the message and the destination application layer address into an appropriate format and sending the message and the destination application layer address via an appropriate stack.

14. The method of claim 1, wherein the alias mechanism effects, depending on the command and destination application layer address associated with the alias identifier, at least one of a conference call communication, a bi-directional call communication, a multiparty call communication, a person to person call communication, a PSTN call communication, an ISDN call communication, a PLMN call communication, an IP-telephony communication, a telephony communication, a facsimile transmission, a pager

communication, a message machine, a voicemail, an instant messaging service and an email communication.

15. The method of claim 2, further comprising:
directly sending the destination application layer address to the alias device.
16. The method of claim 1, wherein the data storage medium is updated with at least one of an application layer address of the first application and the destination application layer address of the second application upon authentication by an access code.
17. The method of claim 16, wherein the access code is at least one of a tone code, a certificate, a smart card, a voice signature, a personal identification number (PIN), a password, and a biometrics-based identification.
18. The method of claim 1, wherein a connection is not established unless both the first and second applications associated with the alias identifier have been authenticated.
19. The method of claim 1, wherein the management interface allows at least one of the first and second applications associated with the alias identifier to be authenticated by at least one of an access code, the application layer address of the first application and the destination application layer address.
20. The method of claim 1, wherein the command is an alert command which sends an alert to the destination application layer address an application.
21. The method of claim 1, wherein the alias identifier is associated with a

plurality of commands and application layer addresses.

22. The method of claim 1, wherein at least one of the first and second applications can do at least one of modify the data storage medium, add an additional command and an additional application layer address, and change any authentication arrangement via the management interface.

23. A system for a communication scheme between at least a first application on a first network and at least a second application on a second network, comprising:

- a first alias identifier;
- a data storage medium; and
- an alias mechanism;

wherein the alias mechanism is configured to resolve the first alias identifier via the data storage medium for an associated second application layer address and a command, the alias mechanism further configured to execute the command associated with the first alias identifier.

24. The system of claim 23, wherein the first and second networks are dissimilar.

25. The system of claim 23, where the first and second networks are similar.

26. The system of claim 23, wherein the alias mechanism is at least one of

- i) an alias device; and
- ii) an alias switching network,

wherein the alias device is further configured to send the first alias identifier to the alias switching network for at least one of resolving, translating and switching, when at least one of the following occurs: the first

alias identifier is found invalid, the second application layer address is unknown; the second application layer address associated with the second network is dissimilar to the first network;

wherein the alias switching network is further configured to convert a communication from the first network to the second network.

27. The system of claim 26, wherein if the first alias identifier is found invalid, then the alias mechanism indicates an error.

28. The system of claim 26, wherein the data storage medium is modified via a management interface.

29. The system of claim 26, wherein access to the data storage medium requires entering an access code.

30. The system of claim 29, wherein the access code is at least one of a tone code, a certificate, a smart card, a voice signature, a personal identification number (PIN), a password, and a biometrics-based identification.

31. A method for a communication scheme between a plurality of applications over heterogeneous networks, comprising:

 sending a plurality of alias identifiers via a plurality of applications;

 receiving the plurality of alias identifiers by an alias mechanism;

 managing the plurality of alias identifiers via the alias mechanism,

 wherein each alias identifier of the plurality of alias identifiers is associated with at least one command, at least one application and at least one application layer address,

 wherein each alias identifier of the plurality of alias identifiers, the at least one command, the at least one application and the at least one

application layer address are stored in a data storage medium,
wherein at least one of: i) the alias mechanism authenticates each
alias identifier of the plurality of alias identifiers via the data storage medium,
and ii) the alias mechanism executes the at least one command associated
with each alias identifier of the plurality of alias identifiers, and
wherein each alias identifier of the plurality of alias identifiers is
managed via the alias mechanism by a single entity so that the single entity
determines the at least one command, the at least one application and the at
least one application layer address associated with each alias identifier of the
plurality of alias identifiers.

32. A method for a communication scheme between a plurality of
applications over heterogeneous networks, comprising:
sending a first alias identifier via a first application;
receiving the first alias identifier by an alias mechanism;
sending a second identifier via a second application;
receiving the second alias identifier by the alias mechanism,
wherein the first alias identifier is associated with a first command, a
first application identity and a first application layer address, and wherein the
first alias identifier, the first command, the first application identity, and the
first application layer address are stored in a data storage medium,
wherein the second alias identifier is associated with a second
command, a second application identity and a second application layer
address, and wherein the second alias identifier, the second command, the
second application identity, and the second application layer address are
stored in the data storage medium,
wherein at least one of: i) the alias mechanism authenticates the first
alias identifier via the data storage medium, ii) the alias mechanism executes
the first command associated with the first alias identifier, iii) the alias

mechanism authenticates the second alias identifier via the data storage medium, iv) the alias mechanism executes the second command associated with the first alias identifier, and v) the alias mechanism effects the first and second commands after the first and second alias identifiers are received and authenticated by the alias mechanism.

33. A method for a communication scheme between a plurality of applications over heterogeneous networks, comprising:

 sending a first alias identifier and a first access mechanism via a first application;

 receiving the first alias identifier and the first access mechanism by an alias mechanism;

 sending the first identifier and a second access mechanism via a second application;

 receiving the first alias identifier and the second access mechanism by the alias mechanism,

 wherein the first alias identifier and the first access mechanism are associated with a first command, a first application identity and a first application layer address, and wherein the first alias identifier, the first access mechanism, the first command, the first application identity, and the first application layer address are stored in a data storage medium,

 wherein the first alias identifier and the second access mechanism are associated with a second command, a second application identity and a second application layer address, and wherein the first alias identifier and the second access mechanism, the second command, the second application identity, and the second application layer address are stored in the data storage medium,

 wherein at least one of: i) the alias mechanism authenticates the first alias identifier and the first access mechanism via the data storage medium,

- ii) the alias mechanism executes the first command associated with the first alias identifier, iii) the alias mechanism authenticates the first alias identifier and the second access mechanism via the data storage medium, iv) the alias mechanism executes the second command associated with the first alias identifier and the second access mechanism, and v) the alias mechanism effects the first and second commands after the first identifier and the first and second access mechanisms are received and authenticated by the alias mechanism.

34. The method of claim 33, wherein the first and second access mechanisms are at least one of a tone code, a certificate, a smart card, a voice signature, a personal identification number (PIN), a password, and a biometrics-based identification.